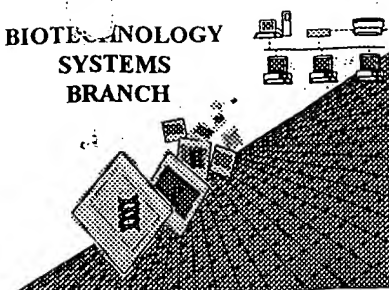


RAW SEQUENCE LISTING **ERROR REPORT**

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/838,718
Source: OIPe
Date Processed by STIC: 5/8/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/838,718

DATE: 05/08/2001
 TIME: 15:53:36

Input Set : A:\Sequence.ST25.txt
 Output Set: N:\CRF3\05082001\I838718.raw

Does Not Comply
 Corrected Diskette Needed
pg 1-2, 4

3 <110> APPLICANT: Steidler, Lothar
 4 Remaut, Erik
 5 Fiers, Walter
 7 <120> TITLE OF INVENTION: USE OF A CYTOKINE-PRODUCING LACTOCOCCUS STRAIN TO TREAT COLITIS
 9 <130> FILE REFERENCE: 2676-4779US
 11 <140> CURRENT APPLICATION NUMBER: US/09/838,718
 11 <141> CURRENT FILING DATE: 2001-04-19
 11 <150> PRIOR APPLICATION NUMBER: PCT/EP99/07800
 12 <151> PRIOR FILING DATE: 1999-10-06
 14 <150> PRIOR APPLICATION NUMBER: EP 98203529.7
 15 <151> PRIOR FILING DATE: 1998-10-20
 17 <160> NUMBER OF SEQ ID NOS: 8
 19 <170> SOFTWARE: PatentIn version 3.0
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 21
 23 <212> TYPE: DNA
 C--> 24 <213> ORGANISM: Artificial *see item 11 on Ena Summary Sheet*
 26 <220> FEATURE:
 27 <223> OTHER INFORMATION: Description of Artificial Sequence: primer used for obtaining the
 28 plasmid pT1MIL1
 30 <400> SEQUENCE: 1
 31 cagtacagcc gggaagacaa t 21
 34 <210> SEQ ID NO: 2
 35 <211> LENGTH: 25
 36 <212> TYPE: DNA
 C--> 37 <213> ORGANISM: Artificial
 39 <220> FEATURE:
 40 <223> OTHER INFORMATION: Description of Artificial Sequence: primer used for obtaining the
 41 plasmid pT1MIL1
 43 <400> SEQUENCE: 2
 44 gcactagtta gcttttcatt ttgat 25
 47 <210> SEQ ID NO: 3
 48 <211> LENGTH: 21
 49 <212> TYPE: DNA
 C--> 50 <213> ORGANISM: Artificial
 52 <220> FEATURE:
 53 <223> OTHER INFORMATION: Description of Artificial Sequence: primer used for obtaining the
 54 plasmid pT1TR5A
 56 <400> SEQUENCE: 3
 57 ctggtccctt ctcttggtga c 21
 60 <210> SEQ ID NO: 4
 61 <211> LENGTH: 53
 62 <212> TYPE: DNA
 C--> 63 <213> ORGANISM: Artificial
 65 <220> FEATURE:
 66 <223> OTHER INFORMATION: Description of Artificial Sequence: primer used for obtaining the
 67 plasmid pT1TR5A

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/838,718

TIME: 15:53:36

Input Set : A:\Sequence.ST25.txt

Output Set : N:\CRF3\05082001\I838718.raw

```

69 <400> SEQUENCE: 4
70 ccactagtctt attaatgatg atgatgatga.tgcgcagtag ctgagtcctg ggg          53
73 <210> SEQ ID NO: 5
74 <211> LENGTH: 5230
75 <212> TYPE: DNA
C--> 76 <213> ORGANISM: Artificial
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Description of Artificial Sequence: plasmid pTREX1
81 <400> SEQUENCE: 5
82 gaattcgatt aagtcattctt acctctttta ttagtttttt cttataatct aatgataaca      60
84 tttttataat taatctataa accatatccc tctttggaat caaaatttat tatctactcc      120
86 ttgttagata tgttataata caagtatcag atctgggaga ccacaacggt ttcccactag      180
88 aaataatttt gtttaacttt agaaaggaga tatacgcatg caggatatct ctagaatgga      240
90 tccggctgct aacaaagccc gaaaggaagc tgagttggct gctgccaccg ctgagcaata      300
92 actagcataa ccccttgagg cctctaaacg ggtcttgagg ggttttttgc tgaaaggagg      360
94 aactatatcc gcatgacctg caggcaagct ctagaatcga tacgattttg aagtggaac      420
96 agataaaaaa aagcagttta aaattgttgc tgaactttta aaacaagcaa atacaatcat      480
98 tgtcgcaaca gatagcgaca gagaaggcga aaacattgcc tggtcgatca ttcataaagc      540
100 aaatgccttt tctaaagata aaacgtataa aagactatgg atcaatagtt tagaaaaaga      600
102 tgtgatccgt agcggttttc aaaatttgca accaggaatg aattactatc ctttttatca      660
104 agaagcgcaa aagaaaaacg aaatgataca ccaatcagtg caaaaaaga tataatggga      720
106 gataagacgg ttcgtgttgc tgctgacttg caccatatca taaaaatcga aacagcaaag      780
108 aatggcgcaa acgtaaaaa agttatggaa ataagactta gaagcaaaact taagagtgtg      840
110 ttgatagtgc agtatcttaa aattttgtat aataggaatt gaagttaaatt tagatgctaa      900
112 aaatttgtaa ttaagaagga gtgattacat gaacaaaaat ataaaatatt ctcaaaactt      960
114 tttaacgagt gaaaaagtag tcaaccaaat aataaaacaa ttgaatttaa aagaaaccga      1020
116 taccgtttac gaaattggaa caggtaaagg gcatttaacg acgaaactgg ctaaaataag      1080
118 taaacaggtg acgtctattg aattagacag tcatctattc aacttatcgt cagaaaaaatt      1140
120 aaaactgaat actcgtgtca ctttaattca ccaagatatt ctacagtttc aattocctaa      1200
122 caaacagagg tataaaattg ttgggagtat tccttaccat ttaagcacac aaattattaa      1260
124 aaaagtgggt ttgaaagcc atgcgtctga catctatctg attgttgaag aaggattcta      1320
126 caagcgtacc ttggatatcc accgaacact aggggtgtct ttgcacactc aagtctcgat      1380
128 tcagcaattg cttaagctgc cagcggaatg ctttcacact aaacccaaaag taaacagtggt      1440
130 cttaataaaa cttaccgcgc ataccacaga tgttccagat aaatattgga agctatatac      1500
132 gtactttgtt tcaaaaatggg tcaatcgaga atatcgtaa ctgtttacta aaaatcagtt      1560
134 tcatcaagca atgaaacacg ccaaagtaaa caatttaagt accgttactt atgagcaagt      1620
136 attgtctatt tttaatagtt atctattatt taacgggagg aaataattct atgagtcgct      1680
138 ttgtgaaatt tggaaagtta cacgttacta aagggaatgt agataaatta ttaggtatac      1740
140 tactgacagc ttccaaggag ctaaagaggt ccctagcgct cttatcatgg ggaagctcgg      1800
142 atcatatgca agacaaaata aactcgcaac agcacttggg gaaatgggac gaatcgagaa      1860
144 aaccctcttt acgctggatt acatatctaa taaagccgta aggagacggg ttcaaaaagg      1920
146 tttaaataaa ggagaagcaa tcaatgcatt agctagaact atattttttg gacaacgtgg      1980
148 agaatttaga gaacgtgtct tccaagacca gttacaaaga gctagtgcac taaacataat      2040
150 tattaacgct ataagtgtgt ggaacactgt atatatggaa aaagccgtag aagaattaaa      2100
152 agcaagagga gaatttagag aagatttaat gccatatgcg tggccgtag gatgggaaca      2160
154 tatcaatttt cttggagaat acaatttga aggattacat gacactgggc aaatgaattt      2220
156 acgtccttta cgtataaaa agccgtttta ttcttaatat aacggctctt tttatagaaa      2280
158 aaatccttag cgtggttttt ttccgaaatg ctggcggtac ccaagaatt agaaatgagt      2340
160 agatcaaaatt attcacgaat agaatcagga aaatcagatc caaccataaa aacactagaa      2400

```

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/838,718

TIME: 15:53:36

Input Set : A:\Sequence.ST25.txt

Output Set: N:\CRF3\05082001\I838718.raw

```

162 caaattgcaa agttaactaa ctcaacgcta gtagtggatt taatcccaaa tgagccaaca 2460
164 gaaccagagc cagaaacaga atcagaacaa gtaacattgg atttagaaat ggaagaagaa 2520
166 aaaagcaatg acttcgtgtg aataatgcac gaaatcgttg cttatTTTTT tttaaaagcg 2580
168 gtatactaga tataacgaaa caacgaactg aatagaaacg aaaaaagagc catgacacat 2640
170 ttataaaaatg tttgacgaca ttttataaat gcatagcccg ataagattgc caaaccaacg 2700
172 cttatcagtt agtcagatga actcttccct cgtaagaagt tatttaatta actttgtttg 2760
174 aagacggtat ataaccgtac tatcattata tagggaaatc agagagtttt caagtatcta 2820
176 agctactgaa ttttaagaatt gtttaagcaat caatcggaat tcgtttgatt gctttttttg 2880
178 tattcaattta aaaaatagtg agtttgtatg aatcatgatg aatgtaaaac ttatataaaa 2940
180 aatagttttat tggagataag aaaattagca aatatctata cactagaaac gttaaagaaa 3000
182 gagttagaaa agagaaatat ctacttagaa acaaaatcag ataagtattt ttcttcggag 3060
184 ggggaagatt atatatataa gttaatagaa aataacaaaa taatttattc gattagtggg 3120
186 aaaaaattga cttataaagg aaaaaaatct ttttcaaaac atgcaatatt gaaacagttg 3180
188 aatgaaaaag caaaccaagt taattaaaca acctatttta taggatttat aggaaaggag 3240
190 aacagctgaa tgaatatccc ttttgttgta gaaactgtgc ttcattgacg cttgttaaag 3300
192 tacaatttta aaaatagtaa aattcgctca atcactacca agccaggtaa aagcaaggag 3360
194 gctatttttg cgtatcgctc aaaatcaagc atgattggcg gtcgtggtgt tgttctgact 3420
196 tccgaggaag cgattcaaga aaatcaagat acatttacac attggacacc caacgtttat 3480
198 cgttatggaa cgtatgcaga cgaaaaccgt tcatcacga aaggacattc tgaacaacat 3540
200 ttaagacaaa tcaatacctt ctttattgat tttgatattc acacggcaaa agaaactatt 3600
202 tcagcaagcg atattttaac aaccgctatt gatttaggtt ttatgcctac tatgattatc 3660
204 aaatctgata aaggttatca agcatatttt gttttagaaa cgccagtcta tgtgacttca 3720
206 aaatcagaat ttaaatctgt caaagcagcc aaaaataatt cgcaaatat ccgagaatat 3780
208 tttggaaagt ctttgccagt tgatctaagc tgtaatcatt ttggtattgc tcgcatacca 3840
210 agaacggaca atgtagaatt ttttgatcct aattaccgtt attctttcaa agaattggca 3900
212 gatttgtctt tcaaacaaac agataataag ggctttactc gttcaagtct aacggtttta 3960
214 agcggtagac aaggcaaaaa acaagtagat gaacctgggt ttaatctctt attgcacgaa 4020
216 acgaaatttt caggagaaaa gggtttaata gggcgtaata acgtcatgtt taccctctct 4080
218 ttagcctact ttagttcagg ctattcaatc gaaacgtgag aatataatat gtttgagttt 4140
220 aataatcgat tagatcaacc cttagaagaa aaagaagtaa tcaaaattgt tagaagtgcc 4200
222 tattcagaaa actatcaagg ggctaatagg gaatacatta ccattctttg caaagcttgg 4260
224 gtatcaagtg atttaaccag taaagattta tttgtccgtc aagggtgggt taaattcaag 4320
226 aaaaaagaaa gcgaacgtca acgtgttcat ttgtcagaat ggaaagaaga ttaattggct 4380
228 tatattagcg aaaaaagcga tgtatacaag cttattttag tgacgaccaa aaaagagatt 4440
230 agagaagtgc taggcattcc tgaacggaca ttagataaat tgctgaaggc actgaaggcg 4500
232 aatcaggaaa ttttctttta gattaaacca ggaagaaatg gtggcattca acttgctagt 4560
234 gttaaactcat tgttgctatc gatcattaaa gtaaaaaaag aagaaaaaga aagctatata 4620
236 aaggcgctga caaattcttt tgacttagag catacattca ttcaagagac tttaaacaag 4680
238 ctagcagaac gccctaaaac ggacacacaa ctcgatttgt ttagctatga tacaggctga 4740
240 aaataaaacc cgcactatgc cattacattt atatctatga tacgtgtttg ttttttcttt 4800
242 gctgttttagc gaatgattag cagaaatata cagagtaaga ttttaattaa ttattagggg 4860
244 gagaaggaga gagtagcccg aaaactttta gttggcttgg actgaacgaa gtgagggaaa 4920
246 ggctactaaa acgtcgaggg gcagtgagag cgaagcgaac acttgatttt ttaattttct 4980
248 atcttttata ggtcattaga gtatacttat ttgtcctata aactatttag cagcataata 5040
250 gatttattga ataggtcatt taagttgagc atatttagag aggaaaatct tggagaaata 5100
252 tttgaagaac ccgattacat ggattggatt agttcttgtg gttacgtggt ttttaactaa 5160
254 aagtagtgaa tttttgattt ttggtgtgtg tgtcttggtt ttagtatttg ctagtcaaa 5220
256 tgattaaata 5230
259 <210> SEQ ID NO: 6

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/838,718

DATE: 05/08/2001
TIME: 15:53:36

Input Set : A:\Sequence.ST25.txt
Output Set: N:\CRF3\05082001\I838718.raw

260 <211> LENGTH: 5906
261 <212> TYPE: DNA
C--> 262 <213> ORGANISM: Artificial
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Description of Artificial Sequence: plamsid pT1NX
267 <400> SEQUENCE: 6

268	gaattcgatt	aagtcattct	acctctttta	ttagtttttt	cttataatct	aatgataaca	60
270	tttttataat	taattctata	accatatccc	tcttttgaat	caaaatttat	tatctactcc	120
272	tttgtagata	tggtataata	caagtatcag	atctgggaga	ccacaacggt	ttccactag	180
274	aaataatttt	gtttaacttt	agaaaggaga	tatacgcatg	aaaaaaaaga	ttatctcagc	240
276	tatttttaag	tctacagtca	tactttctgc	tgcagcccg	ttgtcagggt	tttacgccgg	300
278	cgacggatcc	aaaagaggaa	gacaataaca	agcctggcaa	agaagacaat	aacaagcctg	360
280	gcaaagaaga	caataacaag	cctggcgaag	aagacaacaa	caagcctggc	aaagaagaca	420
282	acaacaagcc	tggtaaagaa	gacaacaaca	agcctggcaa	agaagacggc	aacaagcctg	480
284	gtaagaaga	caacaaaaaa	cctggtaaa	aagatggcaa	caagcctggt	aaagaagaca	540
286	acaaaaaacc	tggtaaagaa	gacggcaaca	agcctggcaa	agaagatggc	aacaaacctg	600
288	gtaagaaga	tggtaacgga	gtacatgtcg	ttaaacctgg	tgatacagta	aatgacattg	660
290	caaagcaaaa	cggcactact	gctgacaaaa	ttgctgcaga	taacaaatta	gctgataaaa	720
292	acatgatcaa	acctggtcaa	gaacttgttg	ttgataagaa	gcaaccagca	aacctatgag	780
294	atgctaacaa	agctcaagca	ttaccagaaa	ctggcgaaga	aaatccattc	atcggtacaa	840
296	ctgtatttgg	tggtattatc	ttagccttag	gtgcagcggt	attagctgga	cgctgctcg	900
298	aactataact	agtagatccg	gctgctaaca	aagcccgaaa	ggaagctgag	ttgctgctg	960
300	ccaccgctga	gcaataacta	gcataacccc	ttggggcctc	taaacgggtc	ttgaggggtt	1020
302	ttttgctgaa	aggaggaact	atatccgat	gacctgcagg	caagctctag	aatcgatag	1080
304	attttggaagt	ggcaacagat	aaaaaaaaag	agtttaaaat	tggtgctgaa	cttttaaaac	1140
306	aagcaaatat	aatcattgtc	gcaacagata	gcgacagaga	aggcgaaaac	attgcctggt	1200
308	cgatcattca	taaagcaaat	gccttttcta	aagataaaaac	gtataaaaga	ctatggatca	1260
310	atagttttaga	aaaagatgtg	atccgtagcg	gttttcaaaa	tttgcaacca	ggaatgaatt	1320
312	actatccctt	ttatcaagaa	gcgcaaaaag	aaaacgaaat	gatacaccaa	tcagtgcaaa	1380
314	aaaagatata	atgggagata	agacggttcg	tgttcgtgct	gacttgcaac	atatcataaa	1440
316	aatcgaaaca	gcaaagaatg	gcggaaacgt	aaaagaagtt	atggaaataa	gacttagaag	1500
318	caaaacttaag	agtgtgttga	tagtgcaagta	tcttaaaatt	ttgtataata	ggaattgaag	1560
320	ttaaattaga	tgctaaaaat	ttgtaattaa	gaaggagtga	ttacatgaac	aaaaatataa	1620
322	aatattctca	aaacttttta	acgagtgaat	aagtactcaa	ccaaataata	aaacaattga	1680
324	atttaaaaaga	aaccgatacc	gtttacgaaa	ttggaacagg	taaagggcac	ttaacgacga	1740
326	aactggctaa	aataagtaaa	caggtaacgt	ctattgaatt	agacagtcac	ctattcaact	1800
328	tatcgtcaga	aaaattaaaa	ctgaatactc	gtgtcacttt	aattcaccaa	gatattctac	1860
330	agtttcaatt	ccctaacaaa	cagaggatata	aaattgttgg	gagtattcct	taccatttaa	1920
332	gcacacaaat	tattaaaaaa	gtggtttttg	aaagccatgc	gtctgacatc	tatctgattg	1980
334	ttgaagaagg	attctacaag	cgtaccttgg	atattcaccg	aacactaggg	ttgctcttgc	2040
336	acactcaagt	ctcgattcag	caattgctta	agctgccagc	ggaatgcttt	catcctaacc	2100
338	caaaagtaaa	cagtgtctta	ataaaaactta	cccgcatac	cacagatggt	ccagataaat	2160
340	attggaagct	atatacgtac	tttgtttcaa	aatgggtcaa	tcgagaatat	cgtcaactgt	2220
342	ttactaaaaa	tcagtttcat	caagcaatga	aacacgcaa	agtaacaat	ttaagtaccg	2280
344	ttacttatga	gcaagtattg	tctattttta	atagttatct	attatttaac	gggaggaaat	2340
346	aattctatga	gtcgcttttg	taaatattgga	aagttacacg	ttactaaagg	gaatgtagat	2400
348	aaattattag	gtatactact	gacagcttcc	aaggagctaa	agaggtccct	agcgtcttta	2460
350	tcattgggaa	gctcgatcaa	tatgcaagac	aaaataaaact	cgcaacagca	cttgagaaaa	2520
352	tgggacgaat	cgagaaaaacc	ctctttacgc	tggattacat	atctaataaa	gccgtaagga	2580

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/838,718

DATE: 05/08/2001
TIME: 15:53:36

Input Set : A:\Sequence.ST25.txt
Output Set: N:\CRF3\05082001\I838718.raw

```

354 gacgggttca aaaaggttta aataaaggag aagcaatcaa tgcattagct agaactatat 2640
356 tttttggaca acgtggagaa ttttagagaac gtgctctcca agaccagtta caaagagcta 2700
358 gtgcactaaa cataattatt aacgctataa gtgtgtggaa cactgtatat atggaaaaag 2760
360 ccgtagaaga attaaaagca agaggagaat ttagagaaga tttaatgcca tatgcgtggc 2820
362 cgtaggatg ggaacatata aattttcttg gagaatacaa atttgaagga ttacatgaca 2880
364 ctgggcaaat gaatttacgt cttttacgta taaaagagcc gttttattct taatataacg 2940
366 gctcttttta tagaaaaaat cottagcgtg gtttttttcc gaaatgctgg cggtagccca 3000
368 agaattagaa atgagtagat caaattattc acgaatagaa tcaggaaaa cagatccaac 3060
370 cataaaaaa ctagaacaac ttgcaaaagt aactaactca acgctagtag tggatttaat 3120
372 cccaaatgag ccaacagAAC cagagccaga aacagaatca gaacaagtaa cattggattt 3180
374 agaaatggaa gaagaaaaaa gcaatgactt cgtgtgaata atgcacgaaa tcgttgctta 3240
376 ttttttttta aaagcgggat actagatata acgaaacaac gaactgaata gaaacgaaaa 3300
378 aagagccatg acacatttat aaaatgtttg acgacatttt ataatgcat agcccgataa 3360
380 gattgccaaa ccaacgctta tcagttagtc agatgaactc ttccctcgta agaagttatt 3420
382 taattaaact tgtttgaaga cggatatata ccgtactatc attatatagg gaaatcagag 3480
384 agttttcaag tatctaagct actgaattta agaattgtta agcaatcaat cggaaatcgt 3540
386 ttgattgctt tttttgtatt catttataga aggtggagtt tgtatgaatc atgatgaatg 3600
388 taaaacttat ataaaaaata gtttattgga gataagaaaa ttagcaataa tctatacact 3660
390 agaaacgttt aagaaagagt tagaaaagag aaatatctac ttagaaacaa aatcagataa 3720
392 gtatttttct tcggaggggg aagattatat atataagtta atagaaaaa acaaaaataat 3780
394 ttattcgatt agtggaaaaa aattgactta taaaggaaa aaatctttt caaaacatgc 3840
396 aatattgaaa cagttgaatg aaaaagcaaa ccaagttaat taaacaacct attttatagg 3900
398 atttatagga aaggagaaca gctgaatgaa tatccctttt gttgtagaaa ctgtgcttca 3960
400 tgacggcttg ttaaagtaca aatttaaaaa tagtaaaatt cgtcaatca ctaccaagcc 4020
402 aggtaaaagc aaaggggcta tttttgcgta tcgctcaaaa tcaagcatga ttggcggtcg 4080
404 tgggtgtgtt ctgacttcog aggaagcgat tcaagaaaat caagatacat ttacacattg 4140
406 gacacccaac gtttatcggt atggaacgta tgcagacgaa aaccgttcac acacgaaagg 4200
408 acattctgaa aacaatttaa gacaaatcaa tacctctttt attgattttg atattcacac 4260
410 ggcaaaaagaa actatttcag caagcgatat ttttaacaac gctattgatt taggttttat 4320
412 gcctactatg attatcaaat ctgataaagg ttatcaagca tattttgttt tagaaacgcc 4380
414 agtctatgtg acttcaaaat cagaatttaa atctgtcaa gcagccaaaa taatttcgca 4440
416 aaatatccga gaatttttg gaaagtcttt gccagttgat ctaacgtgta atcatttttg 4500
418 tattgctcgc ataccaagaa cggacaatgt agaatttttt gatcctaatt accgttatte 4560
420 tttcaaagaa tggcaagatt ggtctttcaa acaaacagat aataagggtt ttactcgttc 4620
422 aagtctaacy gttttaagcg gtacagaagg caaaaaacaa gtagatgaac cctgggttaa 4680
424 tctcttattg cagcaaacga aattttcagg agaaaagggt ttaatagggc gtaataacgt 4740
426 catgtttacc ctctctttag cctactttag ttcaggctat tcaatcgaaa cgtgcgaata 4800
428 taatatgttt gagtttaata atcgattaga tcaaccctta gaagaaaaag aagtaatcaa 4860
430 aattgttaga agtgcctatt cagaaaacta tcaaggggct aatagggaat acattaccat 4920
432 tctttgcaaa gcttggtgat caagtattt aaccagtaaa gatttatttg tccgtcaagg 4980
434 gtggttttaa ttcaagaaaa aaagaagcga acgtcaacgt gttcatttgt cagaatggaa 5040
436 agaagattta atggcttata tttagcgaAAA aagcgatgta tacaagcctt atttagtgac 5100
438 gaccaaaaaa gagattagag aagtgcagg cattcctgaa cggacattag ataaattgct 5160
440 gaaggtactg aaggcgaatc aggaattttt cttaagatt aaaccaggaa gaaatggtgg 5220
442 cattcaactt gctagtgtta aatcattgtt gctatcgatc attaaagtaa aaaaagaaga 5280
444 aaaagaaagc tatataaagg cgtgacaaa ttcttttgac ttagagcata cattcattca 5340
446 agagacttta aacaagctag cagaacgccc taaaacggac acacaactcg atttgtttag 5400
448 ctatgataca ggctgaaaat aaaccccgca ctatgccatt acatttatat ctatgatacg 5460
450 tgtttgtttt ttctttgctg tttagcgaat gattagcaga aatatacaga gtaagatttt 5520

```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/838,718

DATE: 05/08/2001
TIME: 15:53:37

Input Set : A:\Sequence.ST25.txt
Output Set: N:\CRF3\05082001\I838718.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:24 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:37 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:50 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:63 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:76 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:262 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:470 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:674 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/838,718

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☐ Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 ☐ Wrapped Aminos The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 ☐ Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 ☐ Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 ☐ Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 ☐ Variable Length Sequence(s) ____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7 ☐ PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8 ☐ Skipped Sequences (OLD RULES) Sequence(s) ____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 ☐ Skipped Sequences (NEW RULES) Sequence(s) ____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 10 ☐ Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 ☒ Use of "Artificial" (NEW RULES) Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.
Valid response is Artificial Sequence.
- 12 ☐ Use of <220>Feature (NEW RULES) Sequence(s) ____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 ☐ PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.